

Top: Unwise developments are causing our virgin coastline to erode by the year. Natural erosion has its own method of dealing with such developments.

Bottom: Because it occurs over such a wide area, grazing has possibly the most devastating effect on estuaries and tidal flats. Here, cattle graze on mangroves at Russell in the Bay of Islands. Photo: Mark Bellingham

Unlawful reclamations

Equally non-existent is conservation of our foreshores. The Harbours Act seeks to control reclamations. It is administered by the Ministry of Transport. Yet every year several hundred hectares of our foreshores and estuaries are converted to dry land — unlawfully.

New Zealand's largest harbour, the Kaipara, has had over 400 ha of illegal reclamations over the past five years. The Hokianga, the fourth largest, has had 580 ha reclaimed — over 100 ha of that total in the past three years. In Northland, between 1978 and 1983, 2,264 ha of estuarine habitat were destroyed — some 39 percent of the total surveyed estuaries remaining in that region.

All this without the Ministry of Transport — the agency in charge of reclamations — even being aware of what's happening. And what is worse is that if applications *are* made, they're invariably approved.

Crucial habitat

The rich intertidal zone is crucially important to coastal fisheries as well as providing habitat for some common — and less common — birds.

Gulls and shags are everywhere. But treading shyly on the vegetated fringes of this zone are banded rail, fernbird and marsh crake.

The hardiest plants live there too. Mangroves, rushes and small herbs grow in soil devoid of oxygen. They are periodically immersed in salt water, and buffeted by waves and salt-laden winds.

Mangrove areas are especially important as feeding and breeding habitat. They contribute leaf litter or detritus at the rate of up to 8 tonnes/ha/year. (Upper Waitemata Harbour Catchment Study 1983). Detritus breaks down very rapidly and helps generate an estuarine primary production rate four times higher than that of good New Zealand pasture (Upper Waitemata Harbour Catchment Study, 1983).

Devastating grazing

It is precisely these intertidal zones that are viewed by some New Zealanders as wastelands, useful only for free stock grazing or rubbish tips.

Probably it is grazing that has the most devastating effect on the shoreline. Farm stock graze out native vegetation and pug tidal flats, rendering them uninhabitable for marine life. Because it is such a widespread practice, grazing may be the single



Evident from miles away, the slick from Wellington's Moa Point sewage outfall befouls an attractive and rugged coastline, ruining it for diving, swimming, fishing or shellfish gathering. Numerous other cities have still not "cleaned up their sewage act".

Photos: Gerard Hutching